

## Spotted Lanternfly Update

October 2021

The invasive spotted lanternfly certainly made its presence known in the Harrisburg area over the summer. Eggs began hatching early last May, and throughout the summer the insects have grown from small black nymphs with white spots to red, black and white winged adults. Now gray egg masses are showing up on bark and branches of trees or other hard surfaces.

Spotted lanternflies feed on the sap of many trees and other plants, but their preferred food is the Tree of Heaven, or *Ailanthus*. They also seem to particularly like red maple, silver maple, black walnut, sumac, and grapevines. As they feed, they secrete a sticky substance called honeydew, which is then colonized by a black sooty mold. They are a nuisance, but rarely cause significant tree damage, except to young trees.

So what to do? There is no foliar spray available to control them. This time of year, you can swat them with a fly swatter or vacuum them up. You can apply insecticidal soap or neem oil to bark, branches, and foliage where they are feeding. Scraping egg masses off into a container of alcohol or hand sanitizer may reduce the number of insects that hatch near you. Later in the winter, applying dormant oil to egg masses will smother them. But be aware, egg masses are laid throughout the crown of the tree, and most may be out of reach.

If you have tree of heaven nearby, plan to get rid of it next year. It is extremely invasive and difficult to control, AND attracts spotted lanternfly. To get rid of it, it's important to use an herbicide to kill the tree first, and then remove it. Simply cutting a live tree of heaven down will only multiply the problem, as it will sprout prolifically from the roots.

When the insects begin hatching late next spring, be prepared with flypaper and circle traps to capture the insects, or insecticidal soap to kill them. By mid-summer stronger chemicals can be used to treat a particular tree where there's a heavy infestation of spotted lanternflies. Systemic insecticides containing imidicloprid or dinotefuron can be applied via a soil drench around the base of the tree. Once taken up by the tree, spotted lanternflies feeding on it die.

See Penn State Extension's website for excellent written material and instructional videos on managing spotted lanternfly: <https://extension.psu.edu/spotted-lanternfly>.



Eggs hatch in early May. The 1<sup>st</sup> to 3<sup>rd</sup> instar nymphs are black with white dots. They can be found from May to July.



4<sup>th</sup> instar nymphs are red and black with white dots. They can be found from July to September. As they feed, they secrete honeydew, visible here on leaves below.





Adults can be seen between July and December. Black sooty mold grows on the honeydew secreted as they feed.





Egg laying occurs between September and December. Scraping these into a container of alcohol over the winter will reduce the number of insects that hatch in the spring.



Spotted Lanternfly feeds on many different woody species, but tree-of-heaven (*Ailanthus altissima*) is its preferred food. Ailanthus is extremely invasive and difficult to eradicate. A tree must be killed before it is removed, or removal will result in a proliferation of new sprouts. Here the “hack and squirt” method is used to kill a tree: with a hatchet, make shallow cuts into the bark (1 cut per 1” tree diameter) and squirt full strength Roundup into each cut.